

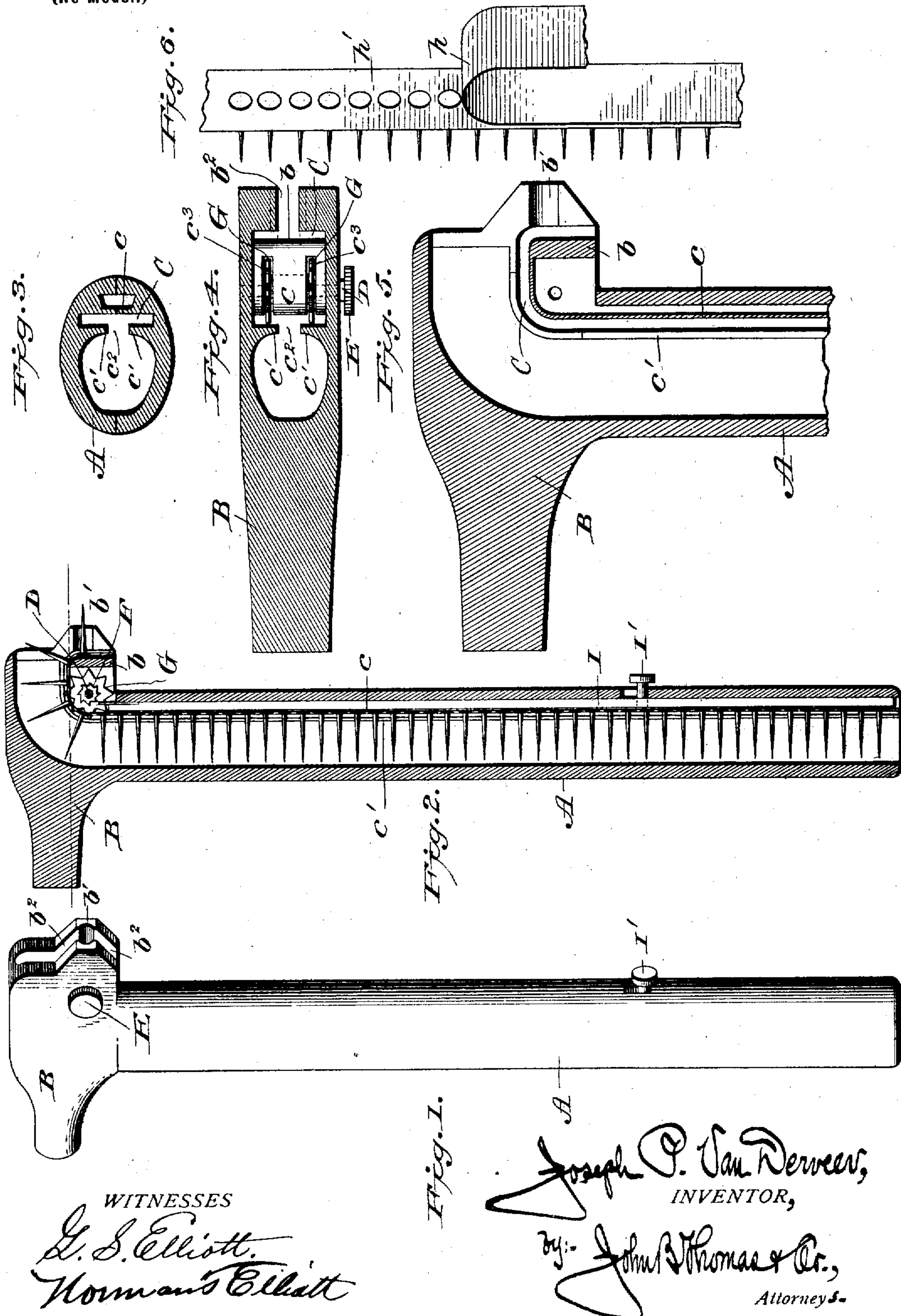
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Patented May 30, 1899.

J. P. VAN DERVEER.
MAGAZINE TACK HAMMER.

(Application filed Feb. 2, 1899.)

(No Model.)



UNITED STATES PATENT OFFICE.

JOSEPH P. VAN DERVEER, OF CLANTON, ALABAMA.

MAGAZINE TACK-HAMMER.

SPECIFICATION forming part of Letters Patent No. 626,012, dated May 30, 1899.

Application filed February 2, 1899. Serial No. 704,289. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH P. VAN DERVEER, a citizen of the United States, residing at Clanton, in the county of Chilton and State of Alabama, have invented certain new and useful Improvements in Magazine Tack-Hammers, of which the following is a specification.

The object of this invention is to produce a magazine tack-hammer which will carry a large number of tacks and through the medium of simple and effective mechanism provide for feeding them one at a time into such position with relation to the head of the hammer as to be readily "set" or struck into an object with force to hold the tack in place for driving, the operation of feeding the tacks and "setting" them being accomplished with one hand, leaving the other free to hold the work it is desired to tack in place. To this end the handle and one end of the head are constructed to carry the tacks and contain mechanism for feeding said tacks successively out of the head and into proper position for setting them into the object, while the other end of the head is shaped for driving the tacks after they have been set. In order to facilitate the operation of feeding the tacks into proper position, they are loosely connected and arranged in a row upon a carrying-belt composed of strips of paper, through one of which the tacks are threaded, while the other forms a backing, the strip through which the tacks are threaded being sufficiently thin to permit the tacks to be torn out or released after being set.

A magazine tack-hammer which is capable of being operated entirely with one hand is particularly serviceable in laying carpets, tacking laths in place, and for other work where it is required that one hand of the operator be free to hold the work, being also of service to an operator having only one hand.

My invention therefore contemplates the production of a hammer that will fulfil this requirement in the simplest and most effective manner.

The following specification enters into a detail description of my invention, reference being had to the accompanying drawings and to letters of reference thereon, which indicate the different parts; and what I claim as new, and desire to protect by Letters Patent, is

more particularly set forth in the appended claims.

In the drawings forming a part hereof, Figure 1 is a side view of a magazine tack-hammer constructed in accordance with my invention. Fig. 2 is a vertical sectional view. Fig. 3 is a transverse sectional view, enlarged, through the handle of the hammer, the carrying-belt being omitted. Fig. 4 is a sectional view, enlarged, through the head of the hammer, the carrying-belt being omitted. Fig. 5 is a vertical sectional view, enlarged, through the upper end of the hammer, the carrying-belt and feeding mechanism being omitted. Fig. 6 is a detail view of the carrying-belt for the tacks.

With reference to said drawings, A designates the handle of the hammer, and B the head, and in carrying out my invention the said handle and one end of the said head are formed hollow to receive the tack-strip and feeding mechanism hereinafter described, while the other end of the head is formed solid to provide sufficient heft to drive the tack. The hollow portion of the head of the hammer is provided within its outer end with a thick wall *b*, in front of which is a circular opening *b'* of little larger diameter than the heads of the tacks which are to be used in connection with the hammer, while above and below said circular opening are slits *b²*, permitting the passage of the stem of the tacks.

C designates a guideway or trough for the tack-strip, the said guideway having a long straight portion which extends through the length of the handle of the hammer and a curved portion which lies in the head, the end of the curved portion terminating in front of a thick wall *b*. The guideway is formed integrally with the hammer and presents inwardly-projecting flanges *c'* and a rear wall *c*, the flanges overlapping the heads of the tacks, while permitting the stems to project through the space between the same. In the curved portion of the guideway are slots *c³* for the passage of the feed-wheels, hereinafter described, while the flanges *c'* terminate or merge into the thick part of the head which forms the butt-end thereof, the said butt-end having the circular opening *b*, hereinbefore referred to, which provides for the passage of the tack from the guideway.

Journalled in the side walls of the hollow portion of the head of the hammer is a shaft D, one end of which projects beyond one of said side walls and is provided with a milled wheel E, and upon this shaft is mounted a wide ratchet-wheel F, having star-wheels G, formed on or attached to the opposite ends thereof. These parts are so located within the head of the hammer that the teeth of the star-wheels pass through the slots c^3 in the guideway or trough C, while the forward part of the intermediate ratchet-wheel F is on a line with the space between the rear wall c of the guideway and rear side of the handle of the hammer, for the purpose hereinafter explained.

The carrying-belt or tack-strip adapted to be used in connection with my improved magazine-hammer is made up of two strips of paper or other suitable material, one strip h being comparatively thick to form a backing, while the other strip h' is thin. In attaching the tacks they are threaded or stuck through the thin strip in a row throughout the length of said strip, after which the thicker strip or backing is applied by mucilage or other adhesive. This forms the tack-strip or carrying-belt for the tacks and arranges them in a convenient manner for use in connection with the hammer.

In placing the tack-strip in the hammer or loading the device ready for use the said strip is passed into the hollow end of the head and into the guideway or trough C, and by turning the star-wheels through the medium of the milled wheel the said tack-strip will be pushed on into the handle until the last tack is in place ready to be set, with its head bearing against the thick wall b and its point projecting through the opening b' . The hammer can then be manipulated to force the point of this tack into an object, and by withdrawing the hammer the head of said tack will be torn through the thin strip of the tack-strip, and thereby released from the hammer and in position to be driven into the object. Then by turning the milled wheel F backward or in the opposite direction from that in pushing the tack-strip into the hammer the said tack-strip will be fed to bring the second tack in position to be set and this operation repeated until all the tacks are used. The end of the tack-strip as it is fed out of the head of the hammer can be torn off should it become in the way of the operation of driving or setting the tacks.

From the foregoing description, in connection with the accompanying drawings, it will be seen that the operation of loading my improved magazine tack-hammer and bringing the tacks successively in position to be set is accomplished in a simple and effective manner, and though it is apparent that the feeding of the carrying-belt or tack-strip to bring the tacks in proper position at the rear end of the head can be effected by a manipulation of the milled wheel I have provided a

device for readily and conveniently operating the star-wheels by the same hand that holds the hammer. To this end a slide or operating-rod I is located in the handle of the hammer, occupying the space between the guideway or trough C and rear side of the hammer, the upper end of said rod being adapted to engage the teeth of the ratchet-wheel to turn the same and effect a turning of the star-wheels, which are formed on said ratchet-wheel, as hereinbefore described. This operating-rod or slide is provided with a knob I' , which projects through a slot in the handle, the said slot limiting the throw of the rod. It will be noted that this rod greatly facilitates the operation of feeding the tacks and makes it possible for the operator to manipulate both the hammer and tack with the hand that grasps the handle of said hammer, and thereby leave the other hand entirely free to handle the work which it is desired to tack in place.

A magazine tack-hammer constructed in accordance with my invention can be manufactured and sold at a reasonable price, and as it carries a large number of tacks and makes provision for quickly driving them a considerable saving of both time and labor is acquired, in addition to the important feature of leaving one hand of the operator free. It will be noted that in feeding the tacks the strip or carrying-belt is fed out of the hammer, so that in loading the device it is only required to pass a new strip in, and by rapidly turning the milled wheel it will be quickly forced into the handle.

It will be understood that the capacity of the hammer or number of tacks to be carried thereby will depend upon the length of the handle and size of tack. It has been demonstrated that at least sixty tacks can be loaded in a hammer having a handle of the ordinary length, and the tacks being purchased in strips can be quickly loaded.

In loading the hammer the operating-rod drops down out of engagement with the ratchet-wheel, so as not to interfere with the turning of the shaft by means of the milled wheel.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a magazine tack-hammer, the combination with the hollow handle and head having a trough or guideway extending there-through and opening out at the rear end of the head, the trough being provided with slots, of a shaft journaled in the head of the hammer, a milled wheel on an extended end of the shaft, star-wheels mounted on the shaft and extending into the trough through the slots; together with a carrying-belt for the tacks located in the trough and engaged by the star-wheels, substantially as shown and for the purpose set forth.

2. In a magazine tack-hammer, the combination with the hollow handle and head hav-

ing a trough or guideway extending there-
through and opening out at the rear end of
the head, the trough being provided with slots;
of a shaft journaled in the head of the ham-
5 mer, star-wheels mounted on the shaft and
extending into the trough through the slots, a
ratchet-wheel also mounted on the shaft, and
an operating-rod having a pawl engaging the
ratchet-wheel, said rod also having a knob
10 projecting through a slot in the handle; to-
gether with a carrying-belt for the tacks lo-
cated in the trough and engaged by the star-
wheels, substantially as shown and for the
purpose set forth.

15 3. In a magazine tack-hammer, the combi-
nation with the hollow handle and head hav-
ing a trough or guideway extending there-
through and opening out at the rear end of
the head, the trough being provided with slots;

of a shaft journaled in the head of the ham- 20
mer, a milled wheel on an extended end of
the shaft, star-wheels mounted on the shaft
and extending into the trough through the
slots, a ratchet-wheel also mounted on the
shaft, and an operating-rod slidable in the 25
handle and having a pawl engaging the
ratchet-wheel, the rod being provided with a
knob projecting through a slot in the handle;
together with a carrying-belt for the tacks lo-
cated in the trough and engaged by the star- 30
wheels, substantially as shown and for the
purpose set forth.

In testimony whereof I affix my signature
in the presence of two witnesses.

JOSEPH P. VAN DERVEER.

Witnesses:

GUY HIGGINS,
W. H. SARTOR.